

CLASSIFICATION:

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BUDGET ITEM JUSTIFICATION SHEET P-40								DATE: February 2004				
APPROPRIATION/BUDGET ACTIVITY <b>OTHER PROCUREMENT, NAVY/BA-1</b>							P-1 ITEM NOMENCLATURE <b>MINESWEEPING EQUIPMENT/BLI #0975</b>					
Program Element for Code B Items: <b>0603654N</b>							Other Related Program Elements <b>0204228N; 0204302N; 0204424N</b>					
	Prior Years	ID Code	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009		To Complete	Total
QUANTITY												
COST (In Millions)		A	6.6	32.1	8.0	12.6	19.4	11.9	10.3		Cont.	Cont.
SPARES COST (In Millions)			0.5	0.9	0.1	0.7	0.2	0.2	0.2		Cont.	Cont.
<p>Mine Sweeping: This program provides systems, subsystems, and engineering change kits for minesweeping and mine neutralization systems used by the surface MCM force. Systems and equipments are used for magnetic, acoustic, and mechanical type minesweeping systems, plus the AN/SLQ-48 (MNS) for mine neutralization. Engineering change kits improve reliability and maintainability and correct deficiencies to allow equipment to perform in accordance with specified requirements.</p> <p>Other Propulsion Equipment: Includes Solar Marine Gas Turbine (MGT) Modification Program for improvement to T1302S gas turbine engines used for driving electric pulse generators on MCM Class ships; MCM/MHC Diesel Engine Improvement Program to improve reliability and maintainability of installed MCM and MHC diesel engines; and Integrated Ship Control System (ISCS) to replace the existing MCM Machinery Control System (MCS) and implement condition-based maintenance. Procurement of improved hardware, including modification kits as a result of Product Improvement Programs, is essential for maintaining/increasing engine reliability. Procurement of special tooling and support equipment is required to facilitate incorporation of modifications as well as enable routine and expanded repair of equipment to improve life cycle support. The procurement of technical documentation, e.g., technical manuals, PMS, Level III production drawings, etc., is essential to maintain complete life cycle support for these engines and related equipment.</p> <p>Underwater EOD Equipment: This program supports Explosive Ordnance Disposal (EOD) Groups, Units and Detachments worldwide. This EOD diving program supplies EOD forces with the necessary diving and diving related equipment to fulfill assigned missions.</p> <p>UQ015-SOLAR MARINE GAS TURBINE (MGT) MODIFICATION MCM: Provides a standardized engine configuration, introduces reliability/maintainability improvements, and implements an effective Integrated Logistics Support (ILS) program realizing fleet mission readiness improvements while supporting the operation of the Regional Repair Center.</p> <p>UQ016-MCM/MHC DIESEL ENGINE PROGRAM: In FY 02/03, this program funded the Voith Schneider Propulsors (VSP). The VSP provides a high degree of precision maneuverability crucial to work in minefields. These propulsors resemble a large eggbeater with each ship having port and starboard units. Although some parts are interchangeable between port and starboard, the assembled units themselves are not. The VSP will also support an overhaul program and serve as a rotatable pool for the MHC 51 Class to maintain reliability of the propeller and prevent casualties during deployment. Isotta Fraschini (I-F) diesel engines installed in MCM-1/MHC-51 class ships have design deficiencies that significantly effect reliability and maintainability, and severely undermine the ability to operate and maintain the ship as designed with reduced manning. This program is critical to correct design deficiencies and improve the Mean-Time-Between-Failure for increased ship operational availability. MCM-1 and MHC-51 class ships are minimally-manned, and six ships have been forward deployed, providing valuable operational experience for the identification of required system improvements. Increased reliability and maintainability is achieved through the implementation of engineering changes such as MACHALTs and associated engineering; ILS; improved spare parts support; correction of cooling system design deficiencies; improvements to the fuel system, lube oil system, drive train, and main bearings; reduction of sea water corrosion; configuration control, and increased spare parts sourcing/availability.</p>												

## P-1 SHOPPING LIST

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<b>P-40 CONTINUATION</b>		<b>February 2004</b>
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	
<b>OTHER PROCUREMENT, NAVY/BA-1</b>	<b>MINESWEEPING EQUIPMENT/BLI #0975</b>	
<p>UQ017-INTEGRATED SHIP CONTROL SYSTEM (ISCS): Funds the MCM/MHC ISCS to implement condition-based maintenance., reduce shipboard preventive maintenance, improve equipment reliability (by detecting changes in equipment performance prior to catastrophic failure), and permit shipboard training, while also replacing the existing MCM/MHC Machinery Control System (MCS). The MCS replacement will bring all MCM/MHC ships to a common configuration.</p> <p>UQ019-MINE WARFARE VULNERABILITY IDENTIFICATION PROGRAM (MIW-VIP): Measures magnetic and acoustic signatures using existing ranges and portable ranges (Forward Area Combined Degaussing and Acoustic Range (FACDAR)). Measurements will be taken in both home port areas and deployment areas to assess a ship's susceptibility to various mines.</p> <p>UQ034-UNDERWATER EOD AND VSW SYSTEMS/EQUIPMENT:</p> <p>DIVER U/W IMAGING SYSTEM: Provides a next generation replacement for the AN/PQS-2A Sonar which will provide increased accuracy for detection and classification of mine-like objects in reduced visibility. Will also provide diver with an underwater navigation capability. An Abbreviated Acquisition Program (AAP) with no formal DT/OT required. System Testing Advanced Development Model (ADM) 9/00 to 11/00; Engineering Development Model (EDM) 10/01 to 4/02.</p> <p>EMERGENCY EVACUATION DIVER SYSTEM: Provides a lightweight 2 person portable stretcher that is air transportable for emergency treatment for hyperbaric related illness for embarked organic EOD forces deployed in Naval Task Groups. An Abbreviated Acquisition Program (AAP) with no formal DT/OT required. System testing 12/01 to 7/02.</p> <p>MICRO DIVER DISPLAY: Provides a low magnetic miniature display for the Underwater Imaging System to enhance capabilities for identification of mine-like objects in the EOD and VSW MCM zone.</p> <p>ADVANCED MINATURE MINE ID SENSOR: Provide a low magnetic high frequency sonar array to the Underwater Imaging System in order to conduct stand -off identification of mines.</p> <p>ADVANCED UNDERWATER LIMPET MINE EQUIPMENT: Provides equipment to the EOD units to enhance their ability to detect, neutralize and gather intelligence on underwater limpet &amp; special attached mines.</p> <p>VSW/EOD EQUIPMENT: Provides for the procurement of VSW/EOD Unmanned Underwater Vehicle's in support of VSW MCM Detachment &amp; EOD Detachment Operations. An Abbreviated Acquisition Program (AAP) with no formal DT/OT required. Systems testing and evaluation 1/01 to 2/05.</p>		

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<p>UQ035-OUTFIT EOD/VSW MCM TOOLS AND EQUIPMENT:</p> <p>VERY SHALLOW WATER MINE COUNTERMEASURES (VSW MCM) OUTFITTING: Provides for procurement of equipment and hardware supporting VSW MCM Detachment operations.</p> <p>OUTFITTING EOD MOBILE UNIT: Provides for outfitting of diving system equipment which enhance mission capability for established EOD Mobile Units.</p> <p>C4I UPGRADES: Provides for the upgrade of existing EOD Mobile Communication Systems (MCS) to C4I requirements.</p> <p>IMPROVED MCM INFLATABLE CRAFT: Provide EOD units with an improved multi-functional, lightweight craft with no magnetic and extremely low acoustic signature to MCM and over-the-horizon operations.</p> <p>UQ036-RE-CONSTITUTION OIF EQUIPMENT: Provides for the re-constitution of EOD equipment.</p> <p>UQ830-PRODUCTION ENGINEERING: Provides production engineering in support of the above procurements. This includes conduct of first article tests, factory acceptance tests, and other production support efforts directly related to delivery of the hardware. In addition for EOD equipment, review all technical data packages prior to procurement and provide procurement instruction to the procuring activity in support of the EOD unified procurement system.</p> <p>UQ850-PRODUCT IMPROVEMENT: Engineering services to improve EOD Systems/Equipment in production to improve maintainability, utilize current technology, and decrease cost.</p> <p>UQ860-ACCEPTANCE, TEST, AND EVALUATION: Test, inspect, and accept first articles and, on a 100% basis, the production quantity of EOD tools and equipment being procured. These tools are man-rated, and proper functioning of each item must be verified.</p> <p>UQTNG-INITIAL TRAINING: Provide training support packages which include curriculum material and training aids for Underwater EOD/VSW MCM Detachment equipment</p>		

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WEAPONS SYSTEM COST ANALYSIS P-5						Weapon System						DATE: February 2004				
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy/BA-1						ID Code A	P-1 ITEM NOMENCLATURE/SUBHEAD MINESWEEPING EQUIPMENT/BLI #0975									
COST CODE	ELEMENT OF COST  SPONSOR N75/N76	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS													
			Prior Years	FY 2003			FY 2004			FY 2005						
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	
UQ015	SOLAR MGMT MOD PROGRAM					326										
UQ016	MCM/MHC DIESEL ENGINE PROGRAM	A				2,996										
UQ017	INTEGRATED SHIP CONTROL SYS	A				274										
UQ019	MIW-VIP	A				1,888			271			398				
UQ034	U/W EOD & VSW SYSTEMS/EQUIP					0			4,689			5,377				
	DIVER U/W IMAGING SYSTEMS	A					110	35	3,875	22	35	786				
	EMERGENCY EVACUATION DIVER SYS	A					7	80	564	7	80	564				
	MICRO DIVER DISPLAY	A					27	9	250	79	9	750				
	ADVANCED MINI MINE ID SENSOR	A								70	10	700				
	ADVANCED U/W LIMPET MINE EQUIPMENT	A								101	5	509				
	VSW/EOD EQUIPMENT	B								2	1,034	2,068				
UQ035	OUTFIT EOD/VSW MCM TOOLS & EQUIP					70			7,420			987				
	VSWMCM OUTFITTING	A							367			237				
	OUTFITTING EOD MOBILE UNIT	A							6,285							
	C4I UPGRADES	A				70			306			276				
	IMPROVED MCM INFLATABLE CRAFT	A							462			474				
UQ036	*RE-CONSTITUTIONS OIF EQUIPMENT	A							18,580							
UQ830	PRODUCTION ENGINEERING	A				210			325			330				
UQ850	PRODUCT IMPROVEMENT	A				551			300			450				
UQ860	ACCEPTANCE, TEST & EVAL	A				278			286			284				
UQTNG	INITIAL TRAINING	A				23			201			220				
*IFF Supplemental funding for body armor, EOD equipment, HMMWV modifications to support mobile tactical communications , base camp support and the portable radio program.																
*Funding is required for software maintenance																
						6,616			32,072			8,046				

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BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System		A. DATE <b>February 2004</b>			
B. APPROPRIATION/BUDGET ACTIVITY <b>Other Procurement, Navy/BA-1</b>					C. P-1 ITEM NOMENCLATURE <b>MINESWEEPING EQUIPMENT/BLI #0975</b>				SUBHEAD <b>71UQ</b>	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
<b>FISCAL YEAR(03)</b>										
<b>FISCAL YEAR(04)</b>										
UQ034										
U/W Imaging System	110	35	NSWCIHD, IH, MD		FFP/CFF	RD INSTR, SAN DIEGO, CA	1/04	9/04	YES	
EEDS	7	80	NSWCIHD, IH, MD		TBD	TBD	3/04	4/04	YES	
Micro Diver Display	27	9	NSWCIHD, IH, MD		TBD	TBD	7/04	4/05	NO	12/03
<b>FISCAL YEAR(05)</b>										
UQ034										
U/W Imaging System	22	35	NSWCIHD, IH, MD		TBD	TBD	1/05	9/05	YES	
EEDS	7	80	NSWCIHD, IH, MD		TBD	TBD	1/05	4/05	YES	
Micro Diver Display	79	9	NSWCIHD, IH, MD		TBD	TBD	1/05	9/05	NO	12/03
Mini Mine ID Sensor	70	10	NSWCIHD, IH, MD		TBD	TBD	1/05	9/05	NO	12/03
Limpet Mine Equipment	101	5	NSWCIHD, IH, MD		TBD	TBD	1/05	9/05	NO	12/03
VSW/EOD Equipment	2	1034	NSWCIHD, IH, MD		TBD	TBD	1/05	8/05	YES	
D. REMARKS										